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BULLETIN

WEST TENNESSEE

STATE NORMAL SCHOOL

MEMPHIS, TENN.

VOL. V.

NOVEMBER, 1916.

No. 4

ANNOUNCEMENTS

Winter Term—January 2 to March 10

Spring Term—March 12 to May 31

Summer Term—June 11 to July 20

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BULLETIN

WEST TENNESSEE STATE NORMAL SCHOOL MEMPHIS

Entered May 22, 1912, at the Post Office at Memphis, Tenn., as
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VOL. V.

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GENERAL STATEMENT.

The West Tennessee State Normal School opened the fall term of 1916-17 with the largest registration since the beginning of the school. Up to date 410 students have enrolled, which is 58 more than any previous fall term. Every county in West Tennessee is represented in this enrollment, as well as six counties in Middle and East Tennessee, and the States of Arkansas, Mississippi, Alabama and Florida.

Shelby County, of course, leads with the largest enrollment. Outside of Shelby, the County of Gibson maintains the lead in numbers, having 25 students; Tipton has 21, Obion 19, Fayette and Hardeman 18 each, Hardin 16, McNairy 12, Lauderdale 11, and smaller representations from the other counties.

The Senior Class is the largest in the history of the school, now numbering 60; the Junior Class has more than 100 students; the fourth year Academic 83, and the third year Academic 60. This means that three-fourths of the students now attending the Normal School are in the four upper classes, which is evidence of the high type of work being done.

All the student activities, as well as class room work, are fully organized and the work is progressing very satisfactorily. The Literary Societies and Christian Associations have added many new members and entered earnestly upon their year's work. The first issue of The Columns, the monthly publication of the students, has been distributed. The literary excellence and typographical appearance of this copy augurs well for the success of the present editorial and business management.

Athletics—football, basket-ball and tennis—are engaging the attention of large numbers of students and affording amusement and interest to the whole school.

Last year the Senior Class put out a very creditable annual, "The De-Soto." It was the first volume of its kind ever issued by a State Normal School in Tennessee, and the work was received with very favorable comment. The present Senior Class, assisted by the various student organizations, are planning an edition for the current year on a larger scale.

THE LIBRARY.

The Normal School Library consists of a carefully selected collection of about 7,000 volumes. The majority of books belong to the departments of English, Education and History, but every department of the school is represented. A special feature of the Library is the splendid collection of about 500 volumes on philology donated by Miss Willie C. Johnson, in memory of her sister, Miss Dora Johnson. The list of periodicals contains all the leading magazines of the United States. They are of inestimable worth to the students in the literary society and class room work, and especially in the study of current events.

The Library is being constantly improved and added to, more than 500 volumes having been purchased during the present term, and a number of additional magazines subscribed to for the coming year.

LABORATORY EQUIPMENT.

Considerable addition has been made to the Laboratory Equipment of the Normal School since last session. Valuable apparatus for the physics, chemistry, biology, home economics and agricultural laboratories has been added. In the Manual Training Department four pieces of power machinery have been installed, each individually motor-driven and safeguarded.

This additional library and laboratory equipment has enabled the Normal School to offer many new courses and has greatly helped in the teaching of every subject in the curriculum. The school is now offering courses in every department which, in number and scope, will compare most favorably with the best normal schools and junior colleges of the country.

EXTENSION WORK.

The Normal School faculty continues to be called upon for a considerable amount of extension work in the various counties of West Tennessee, and they have been present at many institutes and other educational meetings. The following list will give an idea of the extent of the faculty activities in this respect during the fall months:

September: President Brister to Hardeman County; Dean Loggins to Weakley County; Prof. Patterson to Decatur County; Miss Pritchett to Shelby County; Dr. Hood to Weakley County.

October: President Brister to Haywood County; Dean Loggins to Fayette County; Prof. Patterson to Shelby; Prof. Manning to Lauderdale; Dr. Hood to Carrell and Houston; Prof. Webb to Decatur County; Prof. Vaughan, Prof. Webb, Miss Johnson, Miss Dodd, and Miss Buquo to Shelby County; Miss Dodd and Prof. Davis to Tipton County; Miss Pritchett to Gibson County; Prof. Wilson to Weakley County.

November: President Brister, Miss Dodd and Miss Buquo to Shelby County; President Brister, Dean Loggins, Prof. Patterson and Prof. Lee to Memphis City Schools; Prof. Manning to Crockett County; Miss Buquo to Carroll County; Prof. Webb to Lauderdale and Decatur Counties; Prof. Vaughan to Carroll and Henry Counties; Dr. Hood to Carroll and Dyer Counties; Prof. Jones to McNairy County; President Brister to Gibson and Weakley Counties; Prof. Wilson to Fayette County.

CAFETERIA.

During the summer session, 1916, a cafeteria on a small scale was opened especially for the benefit of local students. The plan met with such favor that larger and better quarters have been prepared, and students are now able to obtain wholesome and well-prepared lunches at very reasonable cost.

WINTER AND SPRING TERMS, 1917.

The winter term, 1916-17, of the Normal School will open Tuesday, January 2, and the spring term Monday, March 12, 1917.

Either of these dates will be a good time for new students to enter, especially those teachers whose school term for the current year has expired. Teachers who wish to increase their efficiency, and consequently their earning capacity, will do well to avail themselves of the opportunities offered. Many courses which were begun in September will continue throughout the year, and new courses in many departments will be started at the beginning of each term. Students will be allowed to enter any courses for which they are prepared.

The dormitory accommodations of the Normal School have been taxed to their capacity during the current term. A few students may not return for the winter term; if so, there will be some available space in the dormitory. New students desiring to board in our dormitory should be sure to write for reservation as soon as they decide to attend. Accommodations can be secured for a number of students in homes in the vicinity and in Memphis, but at higher cost than is charged in the school dormitory.

Many of the courses offered at the Normal School are continuous, running through the entire year. But there are a number of one-term courses

which are given each term and also two-term courses which start with the winter term. Students who register for the winter term will be allowed to enter any classes for which they are prepared; and from the many subjects taught any student will be able to select a sufficient number to make a satisfactory and attractive course.

Full description of all courses is given in the general catalog, a copy of which will be sent on application.

EXPENSES.

The cost of attendance at the Normal School is extremely low. No school in this section is prepared to offer anything comparable to the educational advantages of the Normal School at the same prices; and better instruction cannot be found anywhere at any price. There are no tuition charges to students who are residents of Tennessee; non-residents are charged \$20.00 for each of the regular terms and \$10.00 for the summer term. All students pay a registration fee of \$3.00 for each term.

There are a few single rooms in the dormitory and a few others capable of accommodating three students, but in general only two students are allowed to occupy a room. Where there are three students in a room the cost of each is \$2.00 a month; where there are two each is charged \$3.00 a month; and single rooms are rented for \$4.00 a month.

Good board is furnished in the dining hall for \$10.50 a month.

Rooms can be secured in private homes in the immediate neighborhood of the school at reasonable cost, and where desired, board as well.

Expenses for the Winter Term of 10 weeks are: Board, \$26.25; room, \$5.00 or \$7.50; registration, including student activity fee, \$3.00. Total, \$34.25 or \$36.75.

Students not residents of Tennessee will pay \$20.00 tuition for each term. **ALL FEES MUST BE PAID IN ADVANCE.**

All charges are made on the basis of four weeks to a month. Rooms are rented by the quarter and no reduction will be made for absence during the quarter. No reduction in board will be made for absence less than a week.

Nominal fees will be collected from those who take laboratory courses, to cover breakage and the cost of materials, as follows: Physics, 50 cents a term; chemistry, 50 cents to \$1.00 a term; home economics, 25 cents to \$1.50 a term.

WHAT STUDENTS FURNISH.

Students rooming in the dormitories should bring the following articles: Towels, bed linen, blankets, and a pillow. Young ladies in the dormitory will be required to keep their room in order and the matron will make daily inspection.

ROOM RESERVATIONS.

It is very important that those who expect to attend the Normal School in the Winter Term should write to the President and have room reserved as soon as they definitely decide to attend. Only a limited number of rooms in the dormitory are available for the Winter Term, and reservations will be made in the order in which applications are received.

For further information, write to

J. W. BRISTER,
President, West Tennessee State Normal School,
Memphis, Tenn.

ALUMNI NOTES.

Edited by Dean T. B. Loggins

CLASS OF 1913.

Nadine Faye Canada, teacher in city schools Frederick, Okla., since graduation.

Willard Holmes Cummings, teacher of English in Dyer County High School, Trimble, Tenn., 1913-14; married Prof. H. A. Webb of West Tennessee State Normal School, 1914. She says she has been running a private domestic science department ever since, is well pleased, and would not consider any other offer.

Laura Ellis, teacher in Shelby County School, 1913-16; married Mr. Frank Smith, Capleville, Tenn., 1916.

Ben H. Good, graduate student W. T. S. N., 1913-14; Principal Williston High School 1914-15; student University of Tennessee, 1915-16; assistant teacher in high school, Munford, Tenn., 1916-17.

Mary Lee Garrett, grade work in the high school, Decherd, Tenn., since graduation.

Eva Hendrix, grade teacher, Farwell, Texas, since graduation.

Emma Hester, principal of Shelby County High School, 1913-14; assistant in city schools of Corning, Ark., 1914-15.

Joel D. Howerton, student A. & M. College, Miss., 1913-15; teacher in Agricultural High School, Purvis, Miss., 1915-17.

E. L. Hall, assistant in history, W. T. S. N., 1913-14; principal of high school, Hornbeak, Tenn., 1915-16; principal of high school, Munford, Tenn., 1916-17.

Amma Frank Johnson, student University of Chicago, 1913-17.

Beulah Mosby, primary grade work, Bethel Springs, Tenn., 1913-15; principal grade school, Robinsonville, Miss, 1915-16; married Mr. Robert C. Love, Robinsonville, Miss., 1916.

Mollie Phillips, married Mr. Cate Rowan, Jackson, Tenn.

Lucile Posey, principal high school, Cool Spring, Tenn. (Obion County), 1913-15; grade work in city schools, Union City, Tenn., 1915-17.

Mrs. Mary W. Rushing, teacher in high school, Hutchison, Kan., since graduation.

Fannie Belle Smith, principal high school, Gates, Tenn., 1913-14; grade work, public school, Clarksdale, Ark., 1914-15; assistant high school, Elizabethton, Tenn., 1916-17.

Gladys Stewart, teacher in Shelby County schools, 1913-15; married Clifton Keathley, Arlington, Tenn., 1915.

Louise Walker, principal of Yum-Yum School, Somerville, Tenn., since graduation.

Leona Witherington, teacher Brighton High School since graduation.

Vermonta Wilson, assistant in Latin, W. T. S. N., 1913-15; teacher in Coleman High School, Shelby County, 1915-16; Messick Training School, 1916-17.

CLASS OF 1914.

Mary Ella Bishop, grade work, Jackson, Tenn., 1914-16; married Rev. Mariner, Dayton, Ky.

Margaret Brown, teacher in high school, Mountain Grove, Mo., 1914-16; high school Ozark, Mo., 1916-17.

J. Sidney Cantwell, assistant teacher, Rosemark High School, Brunswick, Tenn., 1914-15; principal city schools, Camden, Tenn., 1915-16; student in University of Tennessee, Knoxville, Tenn., 1916-17.

Ethel Cartwright, grade teacher, Oakland Avenue County School, 1914-15; assistant principal of high school, Germantown, Tenn., 1915-17.

Lucy Tate Chambers, assistant principal high school, Roseland, La., 1914-15; public school, Davis, Okla., 1915-17.

Bertha Corbett, domestic science teacher in Rosemark High School, Brunswick, Tenn., 1914-17.

Elizabeth Covington, teacher in Messick Training School, 1914-17.

Adda Mai Cummings, teacher of English and Latin in Whiteville High School, Whiteville, Tenn., 1914-16; student in Peabody College, 1916-17.

Acenah Deen, teacher in Memphis City Schools, 1915-17.

Mary Lou Diggs, teacher of Latin in high school Erin, Tenn., 1914-15, and in high school, Somerville, Tenn., 1915-17.

Louise Farriss, domestic science teacher, Hardeman County High School, Bolivar, Tenn., 1914-15, and in city schools, Columbia, Tenn., 1915-17.

Sarah Alice Flanniken, student in University of Tennessee, 1914-16; assistant teacher in high school Whiteville, Tenn., 1916-17.

Mary Fleming, third and fourth grades in Shelby County School, Cordova, Tenn., 1914-17.

Emma Fuchs, domestic science teacher Bolton College Agricultural High School, Brunswick, Tenn., 1914-15; domestic science and county extension work in Texas, 1915-17.

Cara Lyle Harris, domestic science teacher, Arlington, Tenn., High School, 1914-16; supervisor of home economics in Shelby County schools and county agent for girls' clubs of Shelby County, 1916-17.

Volla Harrison, fifth and sixth grades, Grand Junction, Tenn., since graduation.

Theodosia Hinton, teacher high school, Cordova, Tenn., 1914-17.

Carrie May Mann, teacher National Cemetery School, Shelby County, 1914-15; Highland Heights School, Shelby County, 1915-17.

Arthur H. Miller, student in University of Tennessee, Knoxville, Tenn., 1914-16; principal of Hawkins County High School, Eidson, Tenn., 1916-17.

Virgin W. Raymond, home economics teacher, Cordova, Tenn., 1914-17.

Elizabeth Thweatt, teacher of primary grades, public schools, Arkansas, 1914-16; city schools of Memphis, 1916-17.

CLASS OF 1915.

Maude Alexander, student Tennessee College, Murfreesboro, Tenn., since graduation.

Ruth Anthony, grade teacher, Nankipoo High School, Ripley, Tenn., 1916-17.

Grace Atkins, teacher in Tipton County, 1915-16; married Mr. Earle Stratton, 1916.

Jessie Boone, student Peabody College, 1915-16; teacher Peabody High School, Trenton, Tenn., 1916-17.

Norma Clark, teacher in high school, Jackson, Tenn., 1915-16; in settlement work in Huntsville, Ala., 1916-17.

Aileen Conaghan, teacher in Memphis city schools, 1915-17.

Anne Cothran, teacher in high school, Munford, Tenn., 1915-17.

Victor Davis, grade teacher in Levi School, Shelby County, 1915-16; student in University of Tennessee 1916-17.

Clara Davy, domestic science high school, Metropolis, Ill., 1915-17.

Sarah Diggs, teacher of mathematics in high school, Pinson, Tenn., 1915-17.

Mattie Lee Farriss, seventh and eighth grades, Somerville, Tenn., 1915-17.

Bertha Gottseelig, teacher in Baylor College, Belton, Texas, 1915-16; city schools, Cleborne, Texas, 1916-17.

Wilson Holden, teacher in Shelby County Schools, 1915-16; student University of California, 1916-17.

DeWitt T. Holland, principal of Unionville High School, Dyer County, 1915-16; principal training school, Friendship, Tenn., 1916-17.

Julia M. Jackson, student Peabody College, 1915-16; home economics teacher in high school, Ripley, Tenn., 1916-17.

Bessie Mai Johnston, third and fourth grades in Somerville High School,

1915-16; principal of Fayette County public school, Somerville, Tenn., 1916-17.

Jessie Wayne Johnston, grade work, Shelby County School, Oakville, Tenn., 1915-16, 1916-17.

Mary King, at home in Clarksdale, Ark., since graduation.

Fannie Joe Latta, public schools, Fayette County, Somerville, Tenn., 1915-16, 1916-17.

Minnie Lay, principal of school, Chestnut Grove, Tenn., 1915-16; principal of school, Triune, Tenn., 1916-17.

Mary Kate Long, domestic science teacher, Whiteville, Tenn., 1915-16; grade work in public schools, Palestine, Texas, 1916-17.

Elizabeth McClain, domestic science teacher, Hardeman County High School, Bolivar, Tenn., 1915-16; Levi School, Shelby County, 1916-17.

Alice Murray, teacher in city schools, Jackson, Tenn., 1915-17.

Kathleen Pennel, teacher, Mason, Tenn. 1915-17.

Virginia Pope, teacher in city schools, Jackson, Tenn., 1915-17.

Adele B. Porter, teacher in academic department, Texas Presbyterian College, Milford, Texas, 1916-17.

Kimbrough Swift, principal Shelby County School, Ellendale, Tenn., 1915-16; teacher mathematics in grade school, Bartlett, Tenn., 1916-17.

Ruth Swinebroad, at home in Memphis, Tenn., since graduation.

Lois Thomas, assistant in high school, Millington, Tenn., 1915-17.

Lucy Wetzler, studying music in Memphis since graduation.

Lena Wormeley, teacher in Memphis city schools, 1915-17.

CLASS OF 1916.

Onalee E. Blair, grade teacher in public schools in Earle, Ark., 1916-17.

Virginia Brister, student in University of Tennessee, Knoxville, 1916-17.

Bessie May Clements, domestic science teacher in high school, Gleason, Tenn., 1916-17.

Werdna Coleman, principal of Shelby County School, 1916-17.

W. Sewall Cooper, at home, Buntyn, Tenn., since graduation.

Lucile Copeland, principal of school at Frenchman's Bayou, Ark., 1916-17.

Signa L. Carihfield, principal of consolidated school in Lauderdale County, 1916-17.

J. B. Davidson, student University of Tennessee, Knoxville, 1916-17.

Linos E. Davis, teacher in Benton County schools, Camden, Tenn., 1916-17.

Erie Mae Deen, student in University of Tennessee, 1916-17.

- Thelma Enochs, married Mr. Carson Mitchell, Memphis, June, 1916.
- Gertrude Fritchey, domestic science teacher, South Memphis School, Shelby County, 1916-17.
- John H. George, teacher in high school, Bartlett, Tenn., 1916-17.
- Alice Hazen, teaching music in Memphis, 1916-17.
- Bess Henderson, domestic science, high school, Whiteville, Tenn., 1916-17.
- Ruth Holt, principal of public school, Lavinia, Tenn., 1916-17.
- Paul Y. Isbell, student University of Tennessee, Knoxville, 1916-17.
- Charles A. Johnston, assistant in high school, Tiptonville, Tenn., 1916-17.
- Mrs. Pearl S. Keller, domestic science teacher, Shelby County School, Whitehaven, Tenn., 1916-17.
- Daisy Kirk, grade work, Binghamton, Tenn., Shelby County, 1916-17.
- Lamiza Lanier, teacher in high school, Capleville, Tenn., 1916-17.
- Helen S. Livingston, teacher of English and Latin in high school, Leslie, Ark., 1916-17.
- Nellie Marrs, grade work, Kenton, Tenn., 1916-17.
- Willie E. Marshall, grade work, Bolton College Agricultural High School, Brunswick, Tenn., 1916-17.
- Walter McClellan, elected to teach English in high school, Millington, Tenn., but had to give it up on account of trouble with his eyes, and is now at home in Memphis.
- William D. Mims, student University of Tennessee, Knoxville, 1916-17.
- Opie Mulherron, teacher of home economics in high school, Millville, Ark., 1916-17.
- Mary Prothro, grade teacher in Memphis city schools, 1916-17.
- Barney Rogers, student in University of Tennessee, Knoxville, 1916-17.
- William G. Robinson, principal of public school, Gleason, Tenn., 1916-17.
- C. P. Roland, co-principal of public school, Maury City, Tenn., 1916-17.
- James K. Rutland, student in University of Virginia, Charlottesville, Va., 1916-17.
- Harvey A. Simmons, student in University of Chicago, Chicago, Ill., 1916-17.
- Ethel C. Smith, teacher in Shelby County schools, 1916-17.
- W. A. Smith, principal of public school, Wynnburg, Tenn., 1916-17.
- Corinne Still, teacher Domestic Science, High School, Biloxi, Miss., 1916-17.
- Charlotte L. Stone, teacher in public schools in Arkansas, 1916-17.
- Annie Strong, principal of school, Bethel, Tenn., 1916-17.
- Pansy Strong, teacher in county schools, Atoka, Tenn., 1916-17.

Alice Tatum, teacher of primary grades in county schools, Bartlett, Tenn.

J. C. Taylor, principal of high school, Hohenwald, Tenn., 1916-17.

Donie Lee White, principal of county school, Brownsville, Tenn., 1916-17.

Mal Wilkins, fifth and sixth grades in public schools, Bells, Tenn., 1916-17.

W. E. Wilson, co-principal of public school, Maury City, Tenn., 1916-17.

Evelyn Wise, grade work in Bolton College Agricultural High School, Brunswick, Tenn., 1916-17.

Elizabeth Wormeley, teacher in Memphis city schools, 1916-17.

Vida Yarbrough, teacher of English and History in Tennessee School for the Blind, Nashville, Tenn., 1916-17.

Rowena Young, teacher of Latin in Haywood County High School, Brownsville, Tenn., 1916-17.

SOME REMARKS ON THE ABOVE DATA.

Since the opening of the West Tennessee State Normal School in the fall of 1912, there have been four graduating classes, and one hundred and twenty graduates from the Normal School department. In the above list we account for the entire number.

The purpose for which the Normal School was founded, as given in the Acts of the Legislature creating it, was, "For the education and professional training of teachers for the public schools of the State." How well the Normal School has fulfilled its mission and how well it has served the State, may be shown from the following summaries, and some deductions drawn therefrom. Of the 120 graduates,

(1) Seventy-four have taught and are now teaching in the rural schools of Tennessee.

(2) Twelve are teaching in city schools in Tennessee.

(3) Fourteen are teaching in other States. (Most of these came from other States and paid tuition.)

(4) Nineteen are in colleges and universities, as students, preparing to teach in Tennessee.

(5) Five are in business in Tennessee.

From these summaries it will be seen,

First, that nearly 62 per cent of all graduates are teaching in the rural schools of the State.

Second, that 10 per cent of all graduates are teaching in city schools in Tennessee.

Third, that nearly 17 per cent of all graduates are in colleges and universities and will later teach in Tennessee.

This makes a total of approximately 89 per cent of all graduates teaching and preparing to teach, in the public schools of the State. Leaving out of the estimate those who came from other States and who paid tuition, more than 95 per cent of all graduates of the West Tennessee State Normal School have taught, are now teaching or preparing to teach in the schools of Tennessee.

In addition to the one hundred and twenty full graduates as given in the above list, the Normal School has had one hundred and seventy-four graduates from the academic department. These young men and women have had four years of high school work, including two years of special training in education. The entire number are teaching or are still in school, preparing to teach in the public schools of the State. Practically all these are teaching in rural schools. With the special training they have received in the Normal School, they are enabled to go into their communities and to create a new interest in education and to do better work and make better schools.

Nor is this all of the Normal School's contribution to the cause of public education in the State. In the four years of the Normal School's life, about three thousand people have attended for longer or shorter periods. A very large per cent of these are now teaching in the various counties of this section. Practically one-half the teaching force of West Tennessee have had some training at the Normal School. These have been made better teachers and have been enabled to make better schools and to create a better school spirit, which will make better communities and better citizens.

In addition to this large number of better equipped teachers furnished to the public schools, we believe a real service has been rendered the State and the teachers of the State by the Normal School, by the enlarged vision the student-teachers have received by their attendance and study here. Many teachers come to the Normal School expecting to remain a few weeks to "rub up" for examinations. After catching the spirit of the school, many of them stay one, two, three years, or until graduation. Others, not satisfied even with the amount of training given here, after completing our course, go to colleges and universities and will later again become teachers, better prepared to render service to the State that has given them the opportunities furnished by the Normal School.

In compiling the data for this report, it was necessary to carry on some correspondence with the young men and women who compose our list of graduates. It is exceedingly interesting and gratifying to note some of their testimonies about the school and what it has done for them. A few of the extracts from these reports follow:

Extracts from Letters of Former Students, Now Teaching.

"The Normal School was a great help and inspiration to me. It was through the influence of the school that I obtained my present position, which is one of the most delightful places I have ever had. I heartily commend the institution in every respect. Its curriculum is well adapted to the needs of our county schools."

"I find my Normal work of great benefit to me in teaching. The most helpful part, though, was my practice teaching, which gave me different ideas of presenting the same work."

"My course at Normal has certainly meant something to me. Only wish I had two more such years to go over."

"My Normal School diploma enabled me to enter the city schools with a more advanced position and with a better salary than I should have entered as a teacher without it."

"I would like to thank the teachers, one and all, of the Normal for the high ideals they instilled into the graduates of 1916. Without the Normal training, I could not hold the position that I now hold in the _____ High School."

"I am sure I got value received for the money and time I spent in the Normal last year. I shall gladly recommend the Normal to my pupils and to others desiring to become teachers and wishing the best educational advantages along that line."

"My method course and Practice Teaching at Normal School have proved invaluable."

"The people as a whole do not co-operate with one another in school interests or in other interests. They are not very social. I am indebted to the Normal School for the ideas I have on Social Center development, and am going to do something along that line here. We will give our first entertainment next week, and hope to follow this with definite organization of the parents for the good of the school and community."

"In my mind the West Tennessee Normal School ranks high as an institution of learning. It possesses a wholesome atmosphere, which influenced me in a way I shall not soon forget."

"I spent last year at ——— College, and I can assure you that the instruction given at the Normal School compares favorably with that of ——— College. I shall watch the progress of the Normal with great interest."

"I have one of the best schools in West Tennessee. Have eight excellent teachers helping me. I am getting \$30.00 per month more for my teaching than I did the year before taking my course at Normal School. I feel like my work at Normal is above estimate. No one but those who attend there as much as a year, knows what great work the Normal School is doing for West Tennessee. Thanks to President Brister and Dean Loggins for advising my attending the Normal School."

"Have changed positions each time for a better position."

"My work at Normal School was the cause of my getting the first school for which I applied."

"In the work here (a large city system) I find that a Normal graduate is treated with the greatest courtesy throughout the school system. They seem to value the training that your courses in education give a teacher, and the teacher herself learns to value it more as she finds how very practical the training is. However, more than any special course, two years' constant association with the splendid men and women of your faculty touches the character of any student and equips him better to fill any position to which he may be called."

"The year before graduation I was principal of a three-teacher school, at a salary of \$80.00 per month. My Normal School diploma and a letter of recommendation enabled me this year to secure the principalship of a seven-teacher school, at a salary of \$100.00 per month. In addition to my salary, I receive tuition from all pupils who attend that live outside the district. I already have boarding pupils from four counties and several families are moving to ——— to send their children to school. In dollars and cents alone my investment in the Normal School is paying me now a dividend of over \$2.00 per day. I find that school boards have a great deal of confidence in Normal trained teachers, and in a school of this kind they are often preferred to graduates of many colleges."

Extracts from Letters of Former Students, Now Studying in Colleges and Universities.

"I am now taking a course in Agriculture in the University of ———. I can finish in two years."

"Just tell the fellows for me that Normal School is as good as ———, as far as she goes. I would not think of coming up here without having first taken two years at Normal. Every one shows the due amount of respect when you tell you are from W. T. S. N. I was given a position on the staff of the University Magazine yesterday."

"There are several former students of W. T. S. N. here, and we all agree that the Normal compares most favorably with this University in every respect. We appreciate all the Normal School has done for us, which is much, and we often speak of the fine spirit and loyalty which is so essential."

"The Normal School was a great help and inspiration to me."

"My work there prepared me for good positions as a teacher, and in addition gave me two years' credit at the University. There are nine graduates of the West Tennessee State Normal School here now. The instructors here say the Normal School graduates are among their best students. The instruction given at the W. T. S. N. is par excellence, and the atmosphere of professional life which is thrown around the prospective teacher is of inestimable value."

"I am now taking special work in Chemical Engineering at University of ———. I got sufficient credit from W. T. S. N. to enable me to complete the engineering work in two years. I find the work given in physics and chemistry at Normal School is equal to, if not better, than the freshman and sophomore years here. The equipment in chemistry at the Normal School is far superior."

"I am now a student in the University of Chicago. My present course consists of three subjects, Calculus, English and Advanced Optics. I am majoring in mathematics, hoping to get a Science degree within six or seven quarters. It is a great pleasure to me to reflect upon the two years spent at Normal. I think the institution far above the University of Chicago for social spirit and general congeniality. The people of Normal are of the 'singing' variety, always happy and ready to help one another in any way possible. The people of Chicago are happy all right, but they are all specializing in particular courses, and they are in such a hunt for cold facts, that they have little time for social festivities which are, in my mind, among the great features of W. T. S. N. To every boy and girl in West Tennessee who has not done equivalent to what the Normal School offers, I say, 'Go to the Normal School.'"

"The graduates of the Normal School entered the junior class at the

University and will be able to obtain degrees in two years. It is conceded here that work done in any department at the Normal School is equally as thorough as that done in the same department of the University. As this University ranks as one of the seven standard universities of the South, the Normal School has supplied us with the equivalent of the freshman and sophomore years in any university of the South."

SCHOOL DEBATES.

It is gratifying to note an increasing interest in debating work in both the elementary and high schools of our section. Requests come to the Normal School frequently for suitable subjects for debate. Several teachers of the Normal School have prepared a list, which it is believed the teachers of the elementary and high schools will be glad to consider and to use from time to time. It is recognized that many of our schools have no libraries and the questions have, in general, been chosen accordingly.

SUBJECTS FOR DEBATE IN ELEMENTARY AND HIGH SCHOOLS.

1. A boy is justified in borrowing money to go to college.
2. Newspapers should be taught in the schools.
3. It is advisable for two students to study together.
4. Football is preferable to basket-ball.
5. Term examinations should be abolished.
6. The capital of the United States should be moved to St. Louis.
7. Monday is preferable to Saturday as a school holiday.
8. Faculty supervision of athletics is desirable.
9. Faculty supervision of literary societies is desirable.
10. Student government is desirable.
11. Students should report cheating.
12. Vocational training should be required in schools.
13. Military tactics should be taught in high schools.
14. A Fourth of July without fireworks is desirable.
15. Does prohibition reduce crime?
16. One should read newspapers more than novels.
17. Moving picture shows do more harm than good.
18. Shylock was unjustly treated.
19. Sunday baseball should be prohibited.
20. Labor has been benefited by introduction of labor-saving machinery.
21. Athletics should be made compulsory.
22. Lady Macbeth was responsible for Macbeth's downfall.
23. It is better for a boy to learn a trade than a profession.
24. The assassination of Caesar was justifiable.
25. The country should issue bonds to build roads.
26. Bonds should be issued to build school houses.

SUGGESTED QUESTIONS FOR DEBATE IN THE ELEMENTARY SCHOOLS.

1. Life in the city is more pleasant than life in the country.
2. Automobiles are more useful than horses.
3. Farms produce more wealth than factories.
4. Winter affords more and greater pleasure than summer.
5. Birds are more injurious to growing things than insects.
6. The house fly is more injurious to man than the mosquito.
7. Education is more valuable than riches.
8. A co-operative store would be beneficial to the community.
9. It is more profitable to raise live stock than cotton.
10. It is more profitable to raise horses than mules.
11. Corn is more useful to the nation than cotton.
12. It would pay the farmers in this section to hire an agent to market their produce.
13. Each child should learn a trade in the elementary school.
14. Legal voters in Tennessee should be required by law to vote.
15. The life of a bookkeeper is to be preferred to that of a clerk in a drug store.
16. It would pay every citizen of the town to raise poultry.
17. People in this town should not be allowed to keep dogs.
18. The Deering mower is a better investment than the Standard.
19. A farmer who sells his cattle at two years of age makes a larger profit than by selling them at three years of age.
20. It would be a good investment for the county to build pike roads.
21. Animals reason.
22. The press has exerted a greater influence than the pulpit.
23. The barbarian is happier than the civilized man.
24. The invention of gunpowder has been a curse.
25. One learns more from observation than by reading.
26. The negro has been more cruelly treated by the white man than has the Indian.
27. There should be more forms of military training in the elementary school.
28. The Amazon Valley would be a good place for farming.
29. It would be more pleasant to live where it is always summer.
30. One daily school session is preferable to two.
31. Schools should be in session six days a week and eleven months in the year.
32. The Massachusetts Bay Colony was justified in banishing Anne Hutchinson.
33. The banishment of Roger Williams was justifiable.
34. Washington was justified in leaving the fires to deceive the British.

25. Boys' clubs organized in connection with rural life are of greater value to society than city boys' clubs.
26. The rural telephone has injured rural social life.
27. The execution of John Brown was justifiable.
28. England was justifiable in the course she took toward the American Colonies.
29. Each community should have only one church house.
30. Church unity would develop a higher type of Christianity.
31. The city needs for its services and life stronger and more intelligent men than does the country.
32. Robin Hood was dishonest.
33. It is more difficult to cultivate corn than wheat (cotton).
34. Strawberries are more profitable than the orchard.
35. The development of our country is due more to the steamboats than to the railroads.
36. It would be a good investment for this community to build and operate its own telephone system.
37. Washington was a greater statesman than Jefferson.
38. Poverty, rather than riches, tends to develop character.
39. Poverty is more of an opportunity than an obstacle in the development of character.
40. Boys and girls of fifty years ago had greater opportunities than boys and girls of the present day.
41. Ignorance and superstition have caused more poverty and suffering than war.
42. The South was justified in the course she took in the Civil War.

References—Leiper's *Language Work in the Elementary Schools*; Foster's *Debating for Boys*, Sturgis and Walton, N. Y.

THE FORMATION OF THE READING HABIT.

BY W. E. VAUGHAN.

A digest of a paper read before the West Tennessee Teachers' Association.

Fenelon has said, "If the crowns of all the kingdom of the empire were laid down at my feet in exchange for my love of reading, I would spurn them all." Endless quotations might be cited from scholars and men of affairs of all ages emphasizing the necessity of developing the habit of reading—for reading is a habit. All will agree that the constant companionship with the greatest masters of all ages through the medium of books purifies the taste, deepens the sympathy, enhances one's joy in life, broadens one's vision, puts him in touch with the thoughts, feelings, and aspirations of ages of the past, and cosmopolitanizes him to a degree not possible in any other way. Then, as teachers, we should feel our responsibility in developing this great civilizing and moralizing agency. Carlyle strikingly expresses the great importance of learning to read in his "Heroes and Hero Worship" when he says, "All that a school can do for us is to teach us to read."

To develop this love of reading the teacher herself must be a lover of reading. She must be a wide reader—a reader of the very best, not only of standard literature, but of that particular field known as a juvenile literature. Only by such a broad knowledge can she ever be a source of inspiration to her pupils. It is a commonplace that no stream can rise higher than its source, and nowhere is this truer than the teacher's influence in forming the love and taste for good reading. A teacher, to arouse on the part of the pupil a desire to read any particular book, should know that work thoroughly enough to kindle within his mind, through skillful suggestions, a desire to read it. She cannot communicate this inspiration if she is not thoroughly suffused with it. I wonder whether we, as teachers, read very widely, for the sheer love of reading, the best books of fiction. A few years ago Superintendent Greenwood of Kansas City, Mo., upon investigation at the libraries, discovered that fewer books of general reading were withdrawn by the teachers of the city than by any other professional class.

Not only must the teacher have a knowledge and love for the best in reading, but she must understand the child's mind in its different stages of development; his vital interests at different stages, so she may direct him to read that which will interest him the most and at the same time will be of the greatest force in developing his character. There should be a gradual transition from the realm of fairyland, Mother Goose, and myths, to the delightful "Tanglewood Tales" and "Wonder Books" of Hawthorne;

and then from this realm of pure fancy to the domain of sober-hued reality. Now we are ready for "Robinson Crusoe," "Tom Brown," "David Copperfield," Lanier's "Boys of King Arthur," and that joy of every normal, healthy boy's heart, Stevenson's "Treasure Island." The adolescent boy craves adventure. He demands excitement and hair-breadth escapes in his reading as well as in his everyday life. This is the age when he is so susceptible to the temptations and baneful influence of the yellow back detective stories and Diamond Dick novels. He must be supplied with wholesome books of adventure, and I know of nothing that more admirably meets this requirement than "Treasure Island." Every thrill of the wildest detective stories is supplied here, with a superabundance of bandits, mutiny, and fighting. At the same time the hero, Jim, is a thoroughly normal lad, fond of adventure, to be sure, but always manly, brave, and never lawless. Immorality, lawlessness, and brute strength at no time are heroized; yet sufficient excitement is furnished to satisfy the most blood-thirsty youth. How natural is the transition from these works of adventure to the great medieval romances of Scott. Now the lad can read and enjoy *Ivanhoe*.

And here let me put in a word of portest against the cold-blooded, almost diabolical dissection of a great novel paragraph by paragraph, sentence by sentence, almost word by word. How can a genuine love of reading be developed by requesting a class to read, say "*Ivanhoe*," for four or five months? How can such a painful operation be followed by any voluntary reading of that author by the pupil? After the child has been put through such a deadening, stupefying process, if he ever reads any more of Scott it will not be because of, but in spite of, his previous experience with that author. I do not believe interest can be sustained longer than three or four weeks, even in the class-reading, of any novel.

A genuine love for the best in reading can be gained only by the reading of the originals and not the "Charles-and-Mary-Lambified, insipid, and emuleified editions of standard books that are flooding the country. Occasionally a book of enormous proportions, such as "*Don Quixote*," may remain a closed secret to a majority of readers unless cut and rearranged, but this should be done by masters and with skill so as to preserve as much of the tone and spirit of the original as possible. Miss Davis, of the Cositt Library, told me recently that it was not infrequent occurrence for a pupil to inquire for the very shortest "*Ivanhoe*" in the library. I asked a pupil once the first thing that he did upon taking a new book to read. His naive reply was, "Turn through to see how many pages the book has." Van Dyke, in his very discriminating work on the Poetry of Tennyson, gives this advice to a young woman who had asked him to recommend some helps in the reading of Tennyson: "I advise a first-hand reading of Tennyson; yes, a good old fashioned reading of Tennyson's poems themselves." Dr. P. P. Claxton, in an address before the Missouri State Teachers' Asso-

ciation, remarked that a divinity student ventured the assertion that occasionally he liked to read the Bible: it threw so much light upon the commentaries. To develop a state for real literature, read real literature first-hand. A good book carefully and appreciatingly read is worth dozens of books about that book.

Fortunate is the child who comes to us from the literary home, always having had the encouragement of reading parents; and fortunate is he who comes to us from teachers that have inculcated within him a love for the best in reading. But what shall we do with the lad from twelve to eighteen years of age, who has absolutely no taste for reading, who is probably from a home whose library consists of "Pollard's Lost Cause," "The Lives of the Saints," "The History of Mormonism," "Smith's Bible Dictionary," and "The Royal Path of Life," whose weekly periodicals consist of the church paper, a weekly newspaper, and "The Fireside Visitor": Recently I had an opportunity of spending an hour in the home of a friend of my boyhood days. His two lusty sons, about twelve and fourteen years of age, were in the room. "Boys," said I, "what do you read these nights?" The father did not wait for them to reply. He answered, "Nothing; I can't get them to read. I take the church paper, the Weekly Commercial Appeal, and a farm paper, and they never pick them up." "Poor, starved souls," thought I; "can you expect normal, healthy boys to find satisfaction in such reading only?" I admit it is a herculean task to try to interest people in reading, who have been reared in non-reading homes, and whose environs have been nothing but prosaic and commonplace. In my teaching experience of the past few years I have come in contact with many pupils of this type. Frequently I begin by starting them reading some light popular fiction—a distressingly unorthodox act for an English teacher to commit, I admit. This will start them reading, to say the least. I much prefer taking the lad who is habituated in reading the vilest penny-dreadfuls and run the risk of changing his taste to more wholesome reading—he has the reading habit and imagination as an asset—than to try to develop a taste for reading in the boy who has never read anything. Invariably the child who reads much, even though it is not standard, has an imaginative brain, a fairly extensive vocabulary, and some individuality and originality in expressing his thoughts. Recently, in complimenting a boy for a rather clever theme, I said, "You read much, do you not?" "Yes," he replied, "but I know it is not the kind of reading you approve of. It is Rex Beach, Jack London, and Sherlock Holmes." Give me the boy every time who reads questionable literature rather than the one who reads nothing. The task will be infinitely easier in shifting the vitiated tastes of the former to the reading of good literature than developing a taste in the latter for reading.

If the teacher has only twenty dollars to invest in books for her school library, she can certainly invest this amount more wisely by purchasing

fifty copies of standard works of really readable fiction, than by expending that amount in an unabridged dictionary and a cheap encyclopedia. Give the children something to read, cultivate a desire within them to read, and they will manage to keep interested in these books, even though they may not be able to define the words. Soon the parents will be wanting to read the books, and, then you will be on a fair road to the formation of the reading habit among your pupils. A constant interchange of these books among the various pupils and parents will do more towards the formation of the reading habit than five hundred dollars worth of reference books. Beware of ponderous cyclopedias, compendiums of learning, five-foot shelf of books, and other books sold by subscription. You are paying for a great mass of material that can never be utilized in a grammar school and in few high schools. A small library of usable, readable books is worth incomparably more than shelves creaking with ponderous tomes.

Discourage the pupils' becoming slaves to the "best sellers." Hamilton Mabie said recently that not a work of fiction produced in 1913 would be read ten years from today. Lead the child to realize if he is reading the best of our standard works—those that have stood the enduring test of time—that it is no disgrace not to be able to discuss glibly the so-called "best seller." Occasionally some friend of mine views me with such a look of pity because I am forced to acknowledge that I have not read, say, "The Melting of Molly," or "Keeping Up with Lizzie."

The child should be encouraged to read books that present difficulties. After he has acquired the reading habit, it is better to give him books with much in them above his comprehension, books that actually require serious thought on his part, than to give him nothing but that he can easily understand or that is trivial. There, of course, should be enjoyment in what he reads, and there is a certain delight in attacking a difficult book and being able to read it. A pupil will get much thought and inspiration from even the most difficult books. There is a feeling that Shakespeare is for the literati and the initiated—the high-brows, so to speak. I observed last summer children and more mature people who I knew had never read Shakespeare, as they witnessed that delightful rendition of "As You Like It," by the Coburn players. They seemed to appreciate every line of it, and caught the subtle humor as well as the broadside burlesque of the Immortal Bard of Avon. Children enter into the delightful comedy of Shakespeare and can often render the lines cleverly and intelligently. This fact was amply demonstrated more than a year ago on the Messick campus, when a marvelously artistic and intelligent rendering was given Shakespeare's "Mid-Summer Night's Dream" by pupils no higher than the eighth grade.

When every school is supplied with a library of well selected works of fiction, and when every teacher is a wide reader and a lover of reading, then we shall be on a fair road to develop in every child the habit of reading.

HOME GEOGRAPHY WITH ADVANCED CLASSES.

(This article shows the facts that were emphasized in a discussion of the subject, "Geographic Factors in the Growth of Memphis," by a class of geography teachers from the city schools of Memphis under the direction of Professor P. H. Manning of the West Tennessee State Normal School.)

Geographic conditions have made Memphis the commercial metropolis of the embayment area of the Mississippi Valley. The apex of the embayment area is somewhat north of Cairo, Ill. From this apex it extends southward between diverging sides. The eastern side extends southward through Kentucky and Tennessee, running a few miles west of the Tennessee River, while the western margin follows approximately the main line of the Iron Mountain Railroad through southeastern Missouri and eastern Arkansas. At Memphis the embayment area is about two hundred and fifty miles wide along an east and west line. It is very different from the older hard rock areas on either side, and therefore demands special attention.

In comparatively recent times, geologically speaking, this area was covered by an arm of the great sea that lay to the south. It was slowly filled by inwashing sands and clays, just as parts of the Gulf of Mexico are being filled today. These loose, unconsolidated sands and clays constitute the formations found in a section of this area.

Topography.

At length this arm of the sea was filled, the waters receded, and tens of thousands of square miles of dry land appeared. It must then have been nearly level, and the streams crossing it easily sank their channels in the new soft earth.

Down through the center of the region flowed the Mississippi River, while many tributaries came in on either side. When all these streams had cut as low as they well could, they began to meander and to develop broad floodplains. The larger streams within the area have floodplains several miles wide, and in times of high water, these are flooded to the hill lands on either side. Every stream has carved its own valley, and the interstream remnants of the old peneplain constitute the hill lands of the region. As far as possible the roads follow the dividing ridges between the streams, thus escaping the marshes and swamps of the floodplains. We conclude, therefore, that the topography of the embayment area is due mainly to stream erosion.

Geologic Structure.

It took long periods of time for incoming streams to fill this great embayment trough, and the filling process was more or less interrupted from time to time. Geologists have found certain marked characteristics in the

nature and arrangement of the members of this sedimentary series, and they note certain characteristic life forms in the various members, all of which enable them to classify them as Cretaceous, Tertiary and Recent deposits. These systems of rock outcrop in regular sequence along the margins of the area. On the east side they appear in north and south belts or zones that run across western Kentucky and Tennessee—the oldest, or Cretaceous belt, appearing a few miles west of the Tennessee River, and the others in regular order further to the west. They all dip westward, pass under the Mississippi River, and come to the surface again in eastern Arkansas—thus forming what geologists call a synclinal trough. The outcrops on the Arkansas side have been wellnigh effaced by recent deposits of alluvium and loess. It is this troughlike structure that has made it possible for Memphis to have an abundant supply of the purest artesian water.

The Loess.

On either side of the Mississippi River, throughout this region, is found a fine grained, buff-colored loam that the geologists have called *loess*. In Tennessee, it extends twenty to thirty miles east of bluffs that overlook the Mississippi Bottoms where it thins out to a feather edge. All the high bluffs along the Mississippi River in this region are composed of loess. It is also found well developed about Forrest City, Ark.; and Crowley's Ridge, Ark., is composed of loess. Many geologists believe that this loess was brought down by the long continued floods resulting from the melting of the great glaciers about the headwaters of the Mississippi River. As the great glaciers moved over the bed rock of that region, they ground much of it into rock meal. The rivers transported this rock meal great distances and deposited it for hundreds of miles along their courses, where it was drifted by winds—thus building up that interesting formation known as the loess. In later times the Mississippi and some of its larger tributaries sank their channels into this bed of loess and have developed broad floodplains, leaving the loess standing in high bluffs on either side.

The famous Chickasaw Bluffs, on one of which Memphis is built, have had this origin. It is interesting to note that all the river towns of this region are situated on bluffs of this kind. The spring floods make it impossible for towns to grow up anywhere else. Hickman, Fulton, Randolph, Memphis, Vicksburg and Natchez on the eastern bank of the Mississippi are on bluffs of loess. There are no towns of consequence on the western bank throughout this region, because the river does not run near the bluffs on the western side. The Mississippi River, however, does cut somewhat into the southern end of Crowley's Ridge, developing a bluff on which stands Helena, the only Mississippi River town of any consequence on the Arkansas side.

Steam Navigation.

The first steamboat passed down the Ohio and Mississippi Rivers in

1811. This was an epoch-making event. It marked the beginning of commerce and civilization in the lower Mississippi Valley. Before this time flat boats and keel boats had been used on the Mississippi River System; but their work had been limited mainly to the transportation of skins, furs and farm products to the markets of New Orleans. Flat boats could not come up the river; but keel boats, well-laden with supplies, were slowly and laboriously pushed up stream with poles, or they were pulled along the banks with ropes. A trip made in this way from New Orleans to St. Louis required from one hundred days to six months, and the freight rate between these points was fifty cents a pound; but in a short time after the advent of steamboats, freight rates dropped to two cents a pound.

The effect over the entire Mississippi Valley was marvelous. In spite of the fact that much of the country was then owned and occupied by Indians, numerous trading posts and villages sprang up along the navigable streams. Memphis, already a garrison and trading post, received the stimulus. At first trade was merely a barter with the Indians and hunters. Blankets, powder, lead, whiskey, and tobacco were exchanged for skins and furs. The town of Memphis was surveyed and the streets were laid out in 1819. In 1826 the town was incorporated. In those days Memphis had rivals, and this rivalry continued as long as trade was purely local. Hopefield, Mound City, Raleigh Springs, and Randolph were all thriving villages. But when the country became settled and bids were made for more distant trade, the geographic advantages of Memphis easily brought her to the front, and she soon overshadowed all her rivals.

Controlling Factors in the City's Growth.

It is interesting to inquire, just what were some of the geographic conditions that determined the supremacy of Memphis. The location and growth of cities are not matters of chance. The Indians, intuitively recognizing the fitness of this bluff, built a village here. DeSoto, wandering to some extent along lines of least resistance, found himself, in 1541, on the bluffs at Memphis. The French explorer, Bienville, seeing the strategic importance of this bluff, built Fort Assumption here in 1736. The English and Americans kept garrisons here long before the city was established. Fort Pickering was built in 1801. It is remarkable that all these early explorers recognized the geographic importance of the location of Memphis.

One of the most important factors in the growth of this city is that east and west traffic has always sought Memphis as a favorite point for crossing the river. This is due to a geographic condition—the floodplain of the river is narrower and less swampy here than at points above or below. The great New Madrid earthquake of 1811-13 not only caused Reelfoot Lake in Tennessee but also that great area of "Sunk Lands" across the river in Missouri and Arkansas. These "Sunk Lands" have since been an area of impassable swamps. Below Memphis, the St. Francis

and White Rivers empty into the Mississippi River, making the floodplain very broad and swampy. These and other geographic conditions have forced traffic lines to cross the river at Memphis. William Irvine was keeping a ferry here when Memphis was laid out in 1819. Since then trans-Mississippi traffic has grown till it now requires two great steel bridges to accommodate it.

Another great factor in the growth of Memphis is its situation near the dividing line between the cotton growing region of the south and the food producing region at the north. Memphis profits by the necessary trade relations between these sections. Cheap river transportation to the north and south gives Memphis a control of this trade.

Roads and Transportation.

The roads about Memphis have passed through the usual sequence of change—Indian trails, hunters' trails, public roads, railroads. Geographic conditions have favored the focusing of roads at Memphis. Running out eastward from Memphis is a low divide, approximately parallel with the southern border of the State of Tennessee. This divide separates the waters that flow northwest across the plateau of West Tennessee from the waters that flow southward across Mississippi into the Gulf of Mexico. The Indians had trails leading out eastward from the Chickasaw Bluffs along this divide. The principal trail connected the bluffs with Tusculumbia, Alabama. Other trails passed out along the flank of this divide to the Her-rando and Pontotoc regions and still others ran out northeast. In time all these trails became public roads and ultimately railroads. The Southern Railroad, the first to come to Memphis, follows the old Tusculumbia trail. Keating, in his History of Memphis, tells of a military road that extended from this locality through Haywood County into southern Illinois, 1820. He also says Andrew Jackson got aid from the United States government in 1815 for the construction of a road from Hopefield, just across the river, to Little Rock, Arkansas. Memphis is today probably the greatest railroad center in the South, largely because geographic conditions have made it the logical river crossing point south of St. Louis, and also because some of the water divides in North Mississippi and West Tennessee tend to focus roads at this point.

It is a well recognized fact that if a river makes a great bend in a given direction, the extreme limit of the bend is a favorable point for the growth of a city. A city at such a point can best capture trade in the direction of the bend. So Memphis, on the most southern as well as the most level and commodious of the Chickasaw bluffs, is better located for catching the trade of the rich cotton region to the south than cities on the bluffs north of us.

Soil and Climate.

The soils of the embayment area are, in general, fertile. Much of it is

alluvium of extraordinary fertility. Memphis is the metropolis of one of the greatest alluvial soil areas in the world. The White River Basin, the St. Francis Basin, the famous Yazoo Basin, together with the great flood-plain of the Mississippi and its West Tennessee tributaries are all in Memphis territory. This region is as great in extent as the famous delta of the Ganges, or the deltas of eastern China, that support a population of teeming millions.

The bluff loam or loess and the so-called prairie soils are generously fertile, and the remaining soils are fairly fertile, though they wash readily.

The climate is mild and the growing season is long and warm, favoring the growth of cotton. Cotton is king throughout most of the embayment area. The Weather Bureau gives 49.12 inches as the average rainfall at Memphis for forty-nine years, ending 1914. The growing season, extending from the last killing frost in spring to the first killing frost in autumn is, on the average, 245 days. The mean annual temperature for 42 years ending 1914 was 64 degrees; and the mean for the six months of the growing season was 72.3 degrees. Such conditions make this one of the greatest cotton growing regions in the world. The wealth and progress of Memphis is measured by the number of bales of cotton handled in successive years. Memphis is the greatest inland cotton market in the world.

Health and Reclamation.

Memphis has been greatly handicapped in its progress by sickness, due to geographic environment. Malaria has always been common throughout much of the embayment region. This is due to the prevalence of lakes and swamps in the flood plain areas.

A campaign is now being inaugurated to blot out this plague. It is earnestly hoped that Memphis will take hold of this work with the same zeal that characterized her efforts some years ago in the extermination of yellow fever. The old adage, "Fortune favors the Brave," proved true in that memorable struggle; for it was then found that the structural arrangement of the underlying sands and clays above described would give Memphis the greatest abundance of the purest artesian water—the very thing that was most needed.

The war against malaria offers a double reward. Not only does it assure a stronger and more vigorous manhood, but the drainage of the vast swamp areas will add to Memphis territory millions of acres of the most fertile land on earth, thus transforming a curse into a blessing.

According to estimates of government experts, there must be more than 7,000,000 acres of swamp land within a radius of 150 miles of Memphis. It is also estimated that at least 6,000,000 acres of this land can be reclaimed. This would make 300,000 farms of twenty acres each. If each farm maintains a family of five persons, this would add one and a half million to our rural population. Such a growth in rural population would,

under coming conditions, insure a like growth in our city population, since nearly half our people live in cities. So we may safely say that reclamation means a growth of three million in our population within the next fifty years. Such results are worth working for.

Trade.

As before stated, the trade of Memphis consists largely in an interchange of commodities between the cotton growing region of the South and the food-producing region of the North. Its geographic location near the dividing line between these regions, together with its cheap north and south river transportation, gives to Memphis a monopoly of this trade. Some idea of the magnitude of this trade may be had from these figures furnished by the secretary of the Merchants' Exchange: receipts of corn in Memphis for the calendar year, 1915, 5,950,000 bushels; receipts of oats, 5,968,500 bushels; wheat, 350,000 bushels; meal, 24,800 tons. Total number of bales of cotton received during the same year was 1,070,607.

No great mineral resources have as yet been found within the embayment area, but this area was covered with one of the most magnificent hardwood forests in the world. These forests have made Memphis one of the greatest hardwood lumber markets in the world. The volume of lumber business for the past year was \$16,000,000.

There are eleven cottonseed oil mills in Memphis, and the total value of cottonseed products, for the year 1915 was \$5,949,500.

The Future of Memphis.

It seems that the future of Memphis is conditioned largely on the development of drainage projects and on the development of manufacturing interests. The benefits of drainage have already been pointed out. The great abundance of such raw materials as cotton and lumber seem to guarantee successful manufacture in certain lines. It appears that Memphis should become a great center for the manufacture of furniture and agricultural implements. The rich agricultural region round about furnishes a ready market at our doors. United effort ought to bring cheaper fuel to Memphis; and this, with abundance of raw material and a nearby ready market, ought to insure successful manufacture.

